

**NON-VOLATILE MEMORY AND METHOD WITH BIT LINE
COMPENSATION DEPENDENT ON NEIGHBORING OPERATING MODES**

ABSTRACT OF THE DISCLOSURE

When programming a contiguous page of memory storage units, every time a memory storage unit has reached its targeted state and is program-inhibited or locked out from further programming, it creates a perturbation on an adjacent memory storage unit still under programming. The present invention provides as part of a programming circuit and method in which an offset to the perturbation is added to the adjacent memory storage unit still under programming. The offset is added as voltage offset to a bit line of a storage unit under programming. The voltage offset is a predetermined function of whether none or one or both of its neighbors are in a mode that creates perturbation, such as in a program inhibit mode. In this way, an error inherent in programming in parallel high-density memory storage units is eliminated or minimized.